AMENDMENTS TO THE SPECIFICATION

Replace the current title with the following new title:

CURRENT DRIVEN SERIAL BUS SYSTEM HAVING AN ENERGY SAVING MODE

Replace the paragraph bridging pages 1-2 with the following new paragraph:

In contrast, different bus systems are generally used for a battery ~~power~~powered bus system. This applies in particular to systems which need to be able to react to external influences at any time. This is because, in the bus system of this generic type, a data transfer is always required, which would excessively quickly exhaust a battery owing to the comparatively high power load. The bus systems used for battery ~~power~~ powered bus systems can be operated in a manner which is resistant to interference and defects only with considerable complexity in comparison to the AS-i bus.

On page 2, replace the fifth full paragraph with the following new paragraph:

If, at least in the energy saving mode, the first and/or second predetermined current waveform can be applied automatically to the bus line by the at least one bus slave, and if, in the energy saving mode, the bus master monitors the bus line for the application of the first and/or of the second predetermined current waveform, and if the bus master switches back to the normal mode on detection of the application of the first and/or of the second predetermined current waveform, the process of switching back to the normal mode can also be initiated by the bus slave. In particular, this allows continuous monitoring for external input signals.

On page 4, replace the second full paragraph with the following new paragraph:

In normal operation, the bus master 1 cyclically and successively transmits digital signals to each of the bus slaves 2. After each such transmission, the addressed bus slave 2 then likewise transmits digital signals back to the bus master 1. The cyclic data transmission and the maximum bus extent ~~(.. bus slaves 2)~~, which is predetermined on a system-specific basis, thus ensure that each bus slave 2 receives digital signals transmitted from the bus master 1, and transmits digital signals back to the bus master 1, at the latest after a normal cycle time has elapsed. The type of data transmission will in this case be explained in more detail in the following text in conjunction with Figures 2 and 3.

On page 4, replace the third full paragraph with the following new paragraph:

According to Figure 2, each of the bus modules 1, 2 bridges the power supply lines 7 with a high-value resistor 8 and a switching element 9, in addition to a current limiting resistor ~~99~~9' connected upstream or downstream thereof. Furthermore, the power supply lines 7 are connected to a control circuit 10 for the respective bus module 1, 2. The resistor 8 is chosen to be sufficiently large that the loss current flowing via the resistor 8 is negligibly small. The resistor 8 is used only to detect the potential difference between the power supply lines 7.